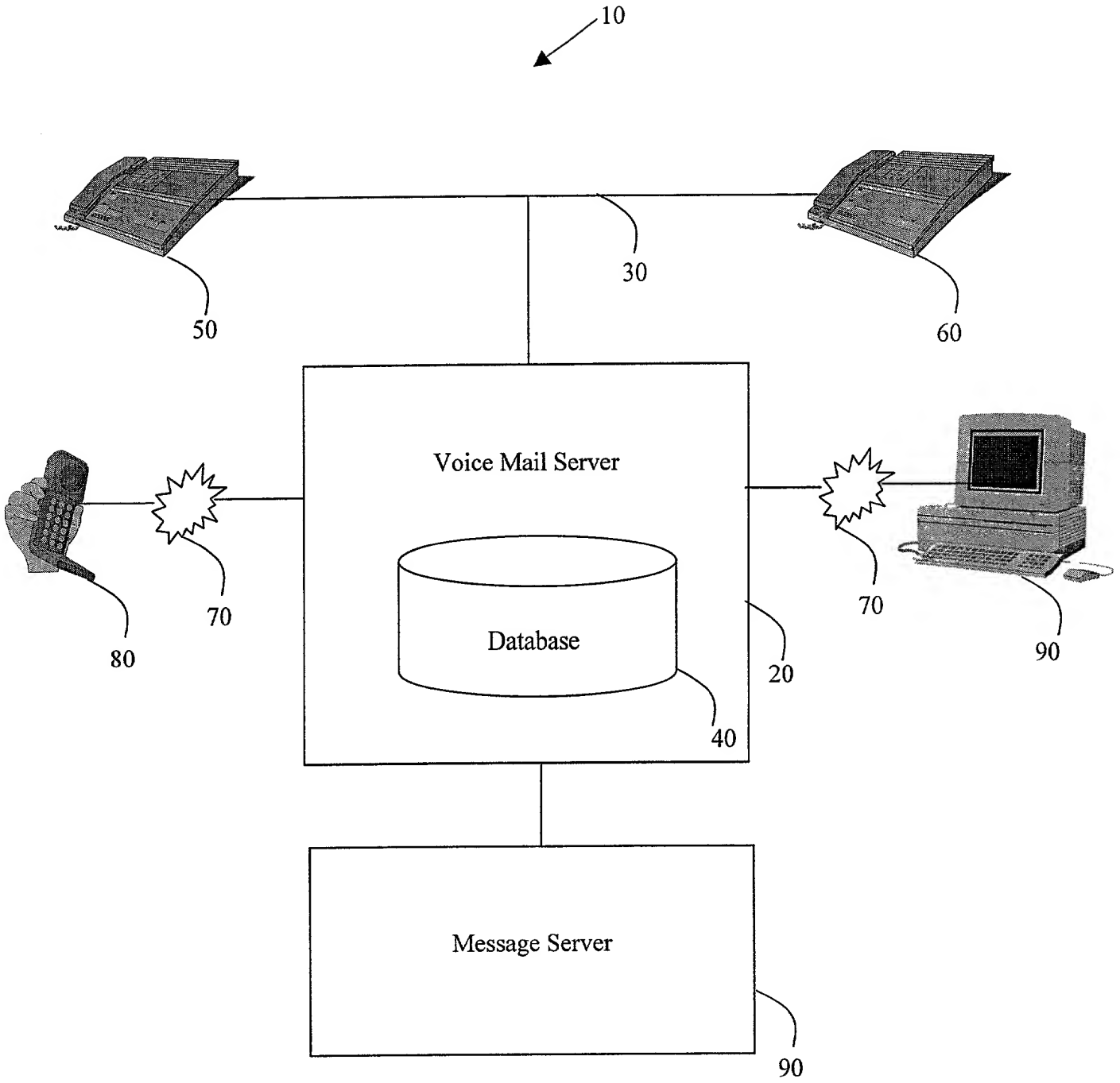
10
50
30
60
Voice Mail Server
Database
40
20
70
80
70
90
Message Server
90

FIG. 1

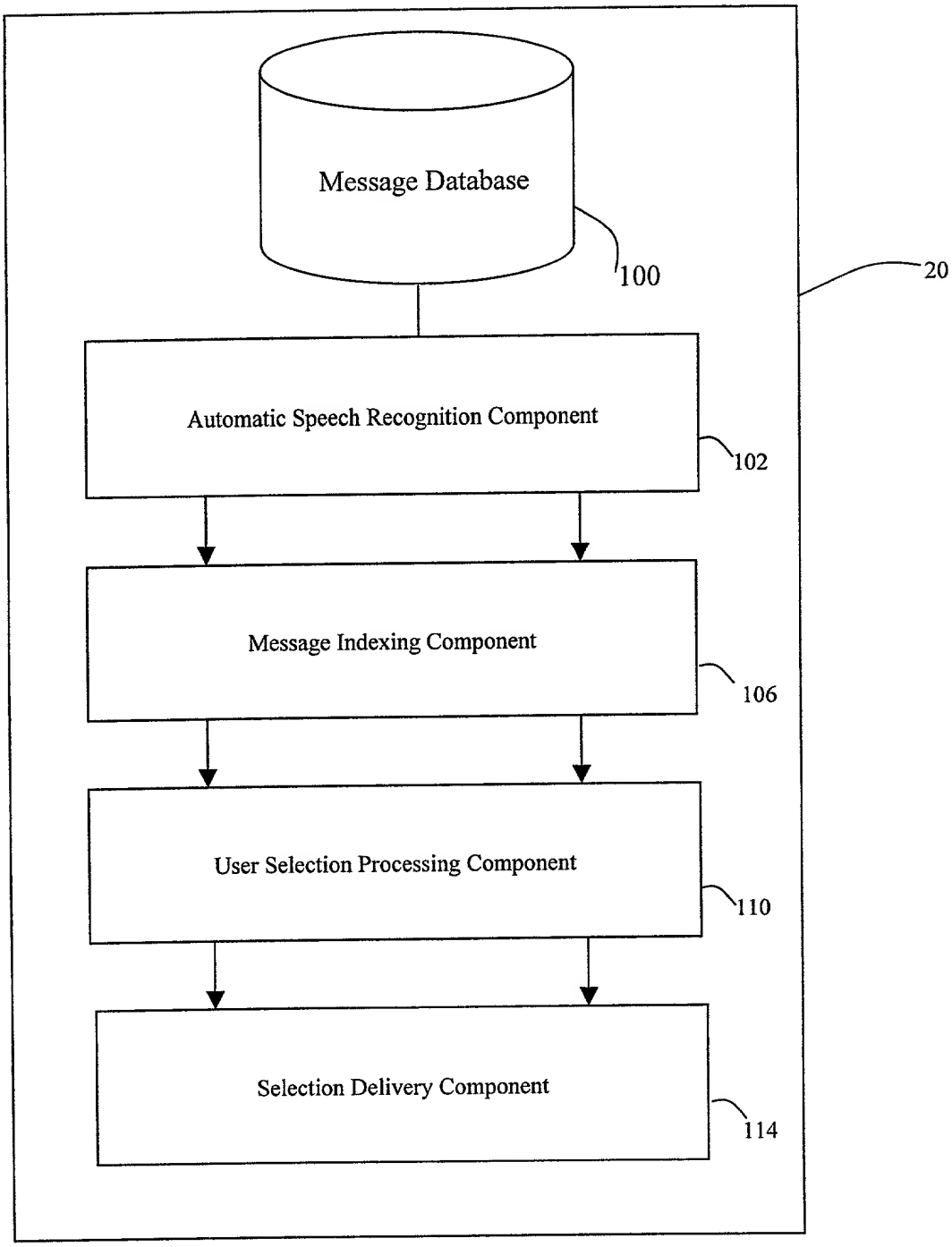
Message Database
100
20
Automatic Speech Recognition Component
102
Message Indexing Component
106
User Selection Processing Component
110
Selection Delivery Component
114

FIG. 2

```
"/121/19980206/m0002_0001.wrd"
0 4300000 <pause> -709.279968
4300000 8000000 hi -985.438416
8000000 11900000 norm -862.465698
11900000 12600000 <pause> -109.502197
12600000 14600000 this -393.968506
14600000 16100000 is -312.906494
16100000 19900000 dennis -711.397949
19900000 20000000 <pause> -23.782471
20000000 24300000 picture -1002.252441
24300000 26400000 from -434.089355
26400000 30900000 kerry -934.740723
30900000 33500000 i'm -617.563477
33500000 36300000 <pause> -459.059570
.
"/121/19980206/m0002_0002.wrd"
0 800000 <pause> -103.467438
800000 5000000 i'll -794.972290
5000000 7000000 <pause> -261.781982
7000000 9300000 try -615.737061
9300000 10600000 to -328.702148
10600000 13800000 reach -748.058838
13800000 15600000 you -281.607422
15600000 19700000 to -926.002930
19700000 26200000 describe -1454.250000
26200000 28600000 <pause> -516.337891
28600000 31800000 jury -849.795410
31800000 37800000 features -1497.018066
37800000 38200000 <pause> -76.515625
38200000 43500000 separate -1221.338867
43500000 44500000 it's -233.091797
44500000 47500000 kerry -511.095703
47500000 48800000 i'm -289.250000
48800000 52100000 cable -889.345703
52100000 55300000 modem -796.843750
55300000 60900000 system -1215.606445
60900000 67200000 <pause> -820.351562
67200000 68300000 i -284.554688
68300000 70100000 can -448.887695
70100000 71400000 be -300.851562
71400000 75600000 reached -878.313477
75600000 77400000 at -326.575195
77400000 81400000 seven -799.068359
81400000 83200000 eight -326.339844
83200000 83300000 <pause> -48.970703
83300000 87000000 one -819.361328
87000000 94200000 <pause> -846.384766
.
"/121/19980206/m0002_0003.wrd"
0 700000 <pause> -64.221443
700000 2800000 two -580.557251
2800000 6900000 five -877.404053
6900000 11600000 nine -860.316040
11600000 13800000 <pause> -234.094727
13800000 17200000 nine -729.974609
17200000 17300000 <pause> -59.046631
17300000 21100000 one -703.621582
21100000 22200000 <pause> -170.018555
22200000 25100000 one -690.791016
25100000 25200000 <pause> -39.735352
25200000 30400000 six -1118.569336
30400000 32900000 <pause> -235.157227
32900000 35500000 thank -618.897461
35500000 37600000 you -496.676270
37600000 41100000 <pause> -393.938477
41100000 44600000 bye -632.617676
44600000 48400000 <pause> -465.435547
48400000 49100000 .onhk -286.765625
49100000 49500000 <pause> 201.351562
```

FIG. 3

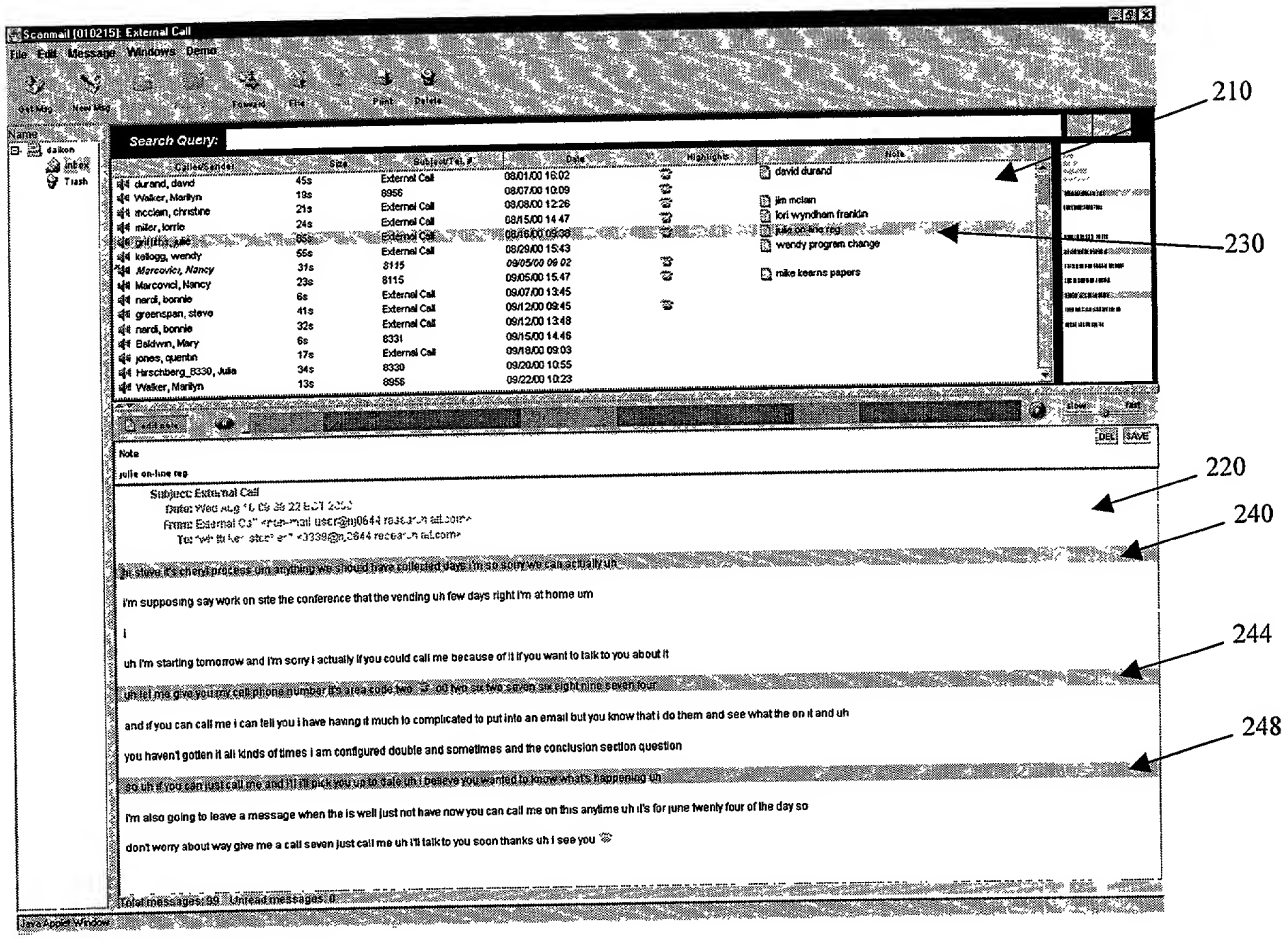
200
210
230
220
240
244
248
Scanmail [010215] External Call
File Edit Message Windows Demo
Search Query:
Name
daikon
Inbox
Trash
Caller/Sender
Size
Subject/Tag
Date
Highlights
Note
durand, david 45s External Call 08/01/00 16:02 david durand
Walker, Marilyn 19s 8956 08/07/00 10:09
mclean, christine 21s External Call 08/08/00 12:26 jim mclain
miller, lorrie 24s External Call 08/15/00 14:47 lori wyndham franklin
griffith, julie 65s External Call 08/16/00 09:00 julie on-line reg
kellogg, wendy 55s External Call 08/29/00 15:43 wendy program change
Marcovici, Nancy 31s 8115 09/05/00 09:02
Marcovici, Nancy 23s 8115 09/05/00 15:47 mike kearns papers
nardi, bonnie 6s External Call 09/07/00 13:45
greenspan, steve 41s External Call 09/12/00 09:45
nardi, bonnie 32s External Call 09/12/00 13:48
Baldwin, Mary 6s 8331 09/15/00 14:46
jones, quentin 17s External Call 09/18/00 09:03
Hirschberg_8330, Julia 34s 8330 09/20/00 10:55
Walker, Marilyn 13s 8956 09/22/00 10:23
DEL
SAVE
Note
julie on-line reg
Subject: External Call
Date: Wed Aug 16 09:35:22 EDT 2000
From: External Call <e-mail user@n0644.research.att.com>
To: <attributed user 8338@n0644.research.att.com>
jn steve it's chem process um anything we should have collected days i'm so sorry we can actually uh
i'm supposing say work on site the conference that the vending uh few days right i'm at home um
i
uh i'm starting tomorrow and i'm sorry i actually if you could call me because of it if you want to talk to you about it
jn tel me give you my cell phone number it's area code two 0 0 two six two seven six eight nine seven four
and if you can call me i can tell you i have having it much to complicated to put into an email but you know that i do them and see what the on it and uh
you haven't gotten it all kinds of times i am configured double and sometimes and the conclusion section question
so uh if you can just call me and i'll i'll pick you up to talk uh i believe you wanted to know what's happening uh
i'm also going to leave a message when the is well just not have now you can call me on this anytime uh it's for june twenty four of the day so
don't worry about way give me a call seven just call me uh i'll talk to you soon thanks uh i see you
Total messages: 99 Unread messages: 0
Java Applet Window

FIG. 4

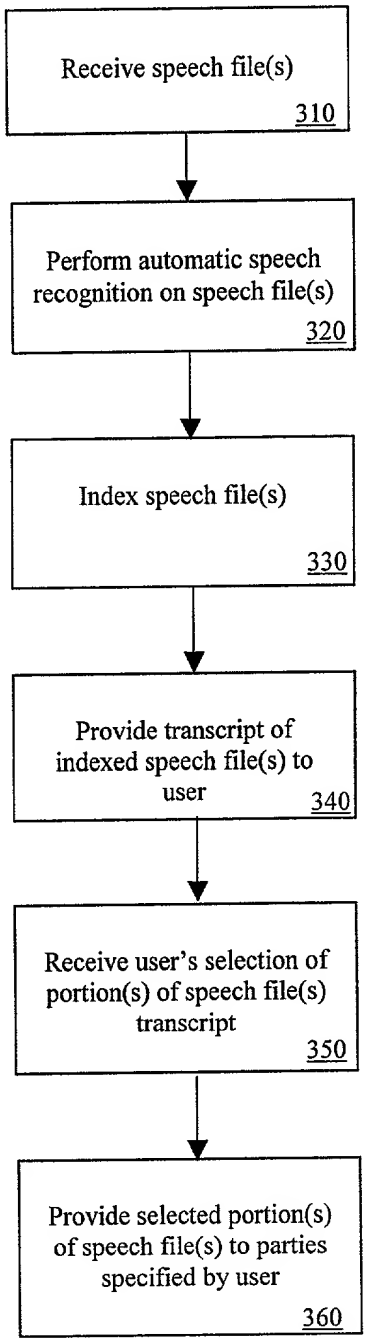
Receive speech file(s)
310
Perform automatic speech recognition on speech file(s)
320
Index speech file(s)
330
Provide transcript of indexed speech file(s) to user
340
Receive user's selection of portion(s) of speech file(s) transcript
350
Provide selected portion(s) of speech file(s) to parties specified by user
360

FIG. 5